

SUPPORT FOR THE AMENDMENT

Support for the amendment to claim 2 is found on page 22, lines 15-23 of the specification. Support for claim 11 is found on page 23, lines 11-16 of the specification. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 2 and 7-11 will now be active in this application.

REQUEST FOR RECONSIDERATION

The claimed invention is directed to a thermoplastic resin suitable for a molding material for an automotive exterior part.

Efforts to improve gas mileage of automobiles can often focus on the weight of the vehicle. Thermoplastic resin materials as external molded articles can be used to meet these needs, but can suffer from difficulties in coating properties, weather resistance, peel properties, flexibility, thermal linear expansion and dimensional precision. As such thermoplastic resins having advantageous properties as external molded articles are sought.

The claimed invention addresses this problem by providing a thermoplastic resin composition comprising 50-85 wt. % of a reinforced acrylic rubber [A], 3-25 wt. % of a diene rubber [B], 5-40 wt. % of a copolymer of a vinyl monomer having a bonded vinyl content of 30 to 50 mass% [D] and 5-25 wt. % of a copolymer of a vinyl monomer having a bonded vinyl content of less than 30 mass% [E]. Applicants have discovered such a combination to provide for excellent dimensional accuracy of molded articles due to excellent coating property, weather resistance, peeling property and flexibility as well as a small linear expansion coefficient. Such a composition is nowhere disclosed or suggested in the cited art of record.

The rejections of claims 1 and 2 under 35 U.S.C. §102(b) over Nanasawa et al., of claims 2 and 7-10 under 35 U.S.C. §102(b) over Brandstetter et al., of claims 1 and 2 under 35 U.S.C. §103(a) over Kamoshita et al. are respectfully traversed.

None of the cited references disclose or suggest the claimed combination of [A} grafter acrylic rubber, [B] grafted diene rubber, [D] vinyl copolymer with 30-50 mass% of bonded vinyl cyanide and [E] vinyl copolymer with vinyl cyanide in an amount of less than 30 mass%.

Nanasawa et al. describes an ABS resin composition comprising a graft copolymer (I) of vinyl cyanide and aromatic vinyl compound grafted onto a rubbery polymer (B) and a copolymer (II) of a vinyl cyanide and an aromatic vinyl compound (column 2, line 64 through column 3, line 4). Rubbery polymer for grafting are described at column 7, lines 9-17 as including diene type rubbers, acrylic rubbers, saturated rubbers, fluorinated rubber and silicone rubber. There is no disclosure of both a grafted acrylic rubber and a grafted diene rubber with two vinyl copolymers having bonded vinyl cyanide contents of 30-50 mass% and less than 30 mass%.

In contrast, the claimed invention is directed to a thermoplastic resin composition comprising 50-85 wt. % of a reinforced acrylic rubber [A], 3-25 wt. % of a diene rubber [B], 5-40 wt. % of a copolymer of a vinyl monomer having a bonded vinyl content of 30 to 50 mass% [D] and 5-25 wt. % of a copolymer of a vinyl monomer having a bonded vinyl content of less than 30 mass% [E]. Applicants note that the claims have been amended to require the presence of a diene reinforced rubber [B] and a vinyl copolymer having a bonded vinyl cyanide content of less than 30 mass%. As the cited reference fails to disclose the claim elements of 1) an acrylic reinforced rubber and a diene reinforced rubber or 2) two vinyl copolymers having different bonded vinyl cyanide contents, the claimed invention is neither anticipated nor rendered obvious by this reference.

Brandsetter et al. merely describes a composition of 50-90 wt. % of a styrene/acrylonitrile copolymer and a grafted alkyl acrylate latex. There is no disclosure of a grafted diene rubber or two vinyl copolymers having different bonded vinyl cyanide contents. As the cited reference fails to disclose the claim elements of 1) a diene reinforced rubber or 2) two vinyl copolymers having different bonded vinyl cyanide contents, the claimed invention is neither anticipated nor rendered obvious by this reference.

Kamoshita et al. describes a thermoplastic for an internal box of a refrigerator having excellent flon resistance. The composition contains 5-100 wt. % of (A) an acrylic rubber graft copolymer, 0-80 wt. % of (B) a diene rubber graft copolymer and 0-85 wt. % of (C) a vinyl copolymer of 45-75 wt. % vinyl cyanide (column 2, line 56 through column 3, line 5). There is no disclosure or suggestion of having two vinyl copolymers and certainly no suggestion of a vinyl copolymer having a bonded vinyl cyanide content of less than 30 mass%. By describing their vinyl copolymer as having **45-75** wt. % of vinyl cyanide, there would be no motivation to include a vinyl copolymer in which the bonded vinyl cyanide content was **less than 30 mass%**.

In contrast, the claimed invention is directed to a resin composition in which a content of vinyl copolymer having a bonded vinyl cyanide content of less than 30%, is from 5 to 25 mass%. Applicants note that the claims have been amended to recite 5 to 25% of a vinyl copolymer in which the bonded vinyl cyanide content is less than 30 %. As such the claimed invention would not have been obvious based on this disclosure. Withdrawal of the rejections under 35 U.S.C. 103(a) is respectfully requested.

The rejection of claims 3-6 under 35 U.S.C. §103(a) over Nanasawa et al. in view of Nakai et al. are believed to be moot as these claims have been canceled without prejudice to their further prosecution.

Applicants note the examiner's objection to the abstract and further note that the molded article can be obtained by molding the thermoplastic composition and such a relationship is clearly identified. Withdrawal of the objection is respectfully requested.

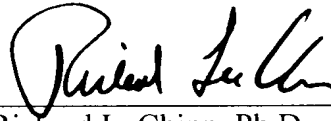
As to the objection as to the determination of the bonded vinyl cyanide content in the acetone soluble fraction, applicant note that analysis of the composition of the acetone-soluble fraction of a vinyl cyanide containing composition is well known to those of ordinary skill in the art as evidenced by the disclosure of Nanawawa et al. U.S. 5,254,622 at column 5,

lines 3-9 such that no further description is necessary. Withdrawal of the objection is respectfully requested.

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

A handwritten signature in black ink, appearing to read "Richard L. Chinn", is written over a horizontal line.

Richard L. Chinn, Ph.D.
Attorney of Record
Registration No. 34,305

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)